

Work Order ID 129914

129914

Page 1

February-23-15 10:32:12 AM

Item ID: D4002-041 Accept *N9000040100* Setup Start *NS1*

Revision ID: Stop *NS2*

Item Name: Aux Tank Drain Hose Assy, Fwd

Start Date: 2/23/15 Start Qty: 4.00 *4* Cust Item ID:

Required Date: 2/23/15 Req'd Qty: 4.00 *4* Customer:

Reference:

Approvals: Process Plan: MLJ Date: 5-02-25 Tooling: _____ Date: _____ Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr								
D4002	D								

100 0.00

100

Purchasing

Purchasing

Memo

Issue P/O: 27652

Purchase part as per Dwg D4002

Part #:156001-3S-0185

Possible Supplier: Aviall / API

Material release note required

0.00

CL15103104 Y

110 0.00

110

Packaging

Packaging

Receive & Inspect for Damage & Mat'l Certs

Memo

0.00

4x 505-03-9

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐															
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Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Item ID: D4002-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Aux Tank Drain Hose Assy, Fwd
Start Date: 2/23/15 Start Qty: 4.00 ***4*** Cust Item ID:
Required Date: 2/23/15 Req'd Qty: 4.00 ***4*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* QC Quality Control	QC6- Inspect dimensions to drawing Memo	0.00 0.00				(4)			DAS 38 9-89 MAR 10 2015
121 *121* Small Fab Small Fab	Memo 1- Assemble fitting, o-ring and valve as per dwg D4002 2- Install label as per dwg	0.00 0.00				4X			DAS 28 9-89 MAR 12 2015
122 *122* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00				(4)			DAS 38 9-89 MAR 13 2015

DQA: _____ Date: _____



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Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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130 Identify as per dwg & Stock Location: St 211 0.00

130

Packaging

Memo

0.00

Packaging

4 MAR 16 2015 DAS 06 9-89

140 QC21- Final Inspection - Work Order Release 0.00

140

QC

Memo

0.00

Quality Control

MLS 1503-16

MF 15-3-16

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐ Scrap ☐ Machining ☐ Small Fab ☐ Prod. Eng. Coord. ☐ Quality ☐ Use-as-is ☐ Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Large Fab ☐ Composite ☐ Supplier ☐
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
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Doc/Data									
Equip/Tooling									
Handling/Pre									
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Operator									
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February-23-15 10:32:11 AM

1 2991 4

D4002-041

Required Date: 2/23/15

Required Qty: 4.00

Comments: IPP rev A 10.01.21 new issue Prelim EC verified by:DD IPP rev B
10.11.03 added MS29528-04 DD verified by:EC

[illegible]

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

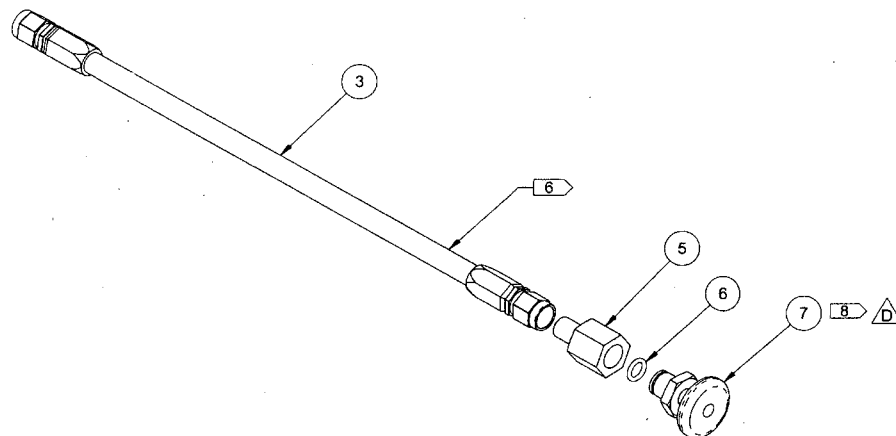
Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Crosstube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
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Doc/Data									
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Handling/Pre									
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Supplier									
Training									
Transport									
Unapproved									

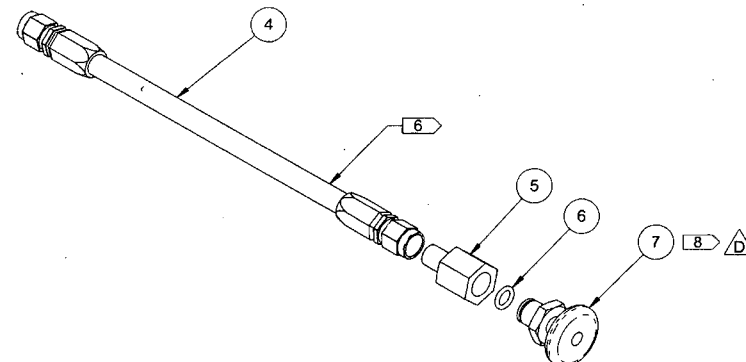
FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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ITEM NO.	QTY. -041	QTY. -043	PART NUMBER	DESCRIPTION	JOHN CAMERON AVIATION PART NUMBER
1	X		D4002-041	AUX TANK DRAIN HOSE ASSEMBLY, FWD	JCA-M47-1-13
2		X	D4002-043	AUX TANK DRAIN HOSE ASSEMBLY, AFT	JCA-M47-1-16
3	1		D4002-1	HOSE ASSEMBLY	
4		1	D4002-3	HOSE ASSEMBLY	
5	1	1	AN894D4-3	FITTING	
6	1	1	MS29512-04	O RING	
7	1	1	CCB4320	FUEL DRAIN VALVE (MS29528-4)	



D4002-041 DRAIN HOSE - FRONT



D4002-043 DRAIN HOSE - REAR

RELEASED
2011-11-16
JMD

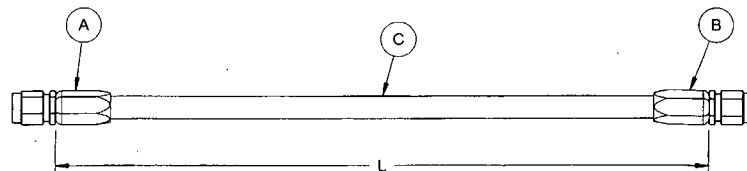
NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N AND B/N USING D2729-1 LABEL INSTALLED WITH D2182-045 HEAT SHRINK
- 7) WEIGHT: D4002-041 - 0.21 lbs
D4002-043 - 0.20 lbs
- 8) DRAIN VALVE MAY NOT APPEAR EXACTLY AS PICTURED

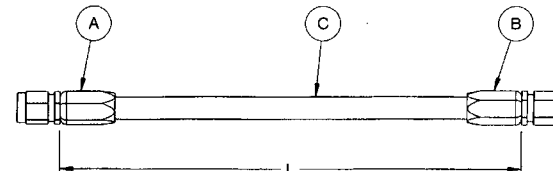
D	ADDED NOTE 8	DC	11.10.06
C	ADDED 8.00" TO D4002-1/-3 HOSES; AFFECTED WEIGHT	MB	11.09.14
B	CHANGE LENGTH MEASUREMENT FOR -3, ZN C2-2	HS	10.11.03
A	NEW ISSUE	HS	10.03.01
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. D
MFG. APPR.		D4002	SHEET 1 OF 2
APPROVED		TITLE	SCALE
DE APPR.		HOSE ASSEMBLY	NTS
DATE	11.10.06	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

DART AEROSPACE PART NUMBER	JOHN CAMERON AVIATION PART NUMBER
D4002-1	REF JCA-M47-1-13
D4002-3	REF JCA-M47-1-16
D4002-5	JCA-M47-2-13
D4002-7	JCA-M47-2-25

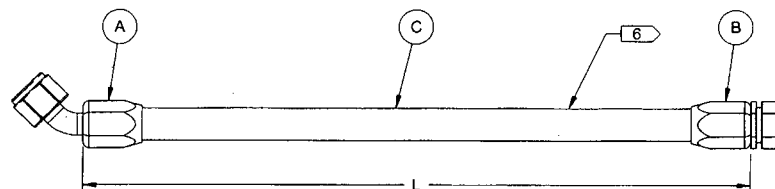
SPECIFICATION CONTROL DRAWING



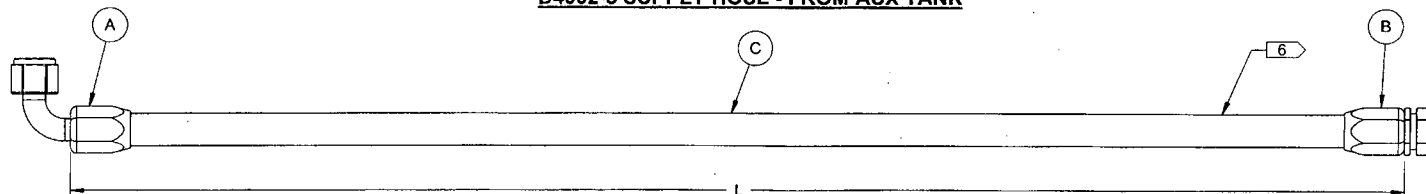
D4002-1 HOSE ASSEMBLY



D4002-3 HOSE ASSEMBLY



D4002-5 SUPPLY HOSE - FROM AUX TANK



D4002-7 SUPPLY HOSE - PUMP TO MAIN TANK FILLER NECK

DART PART NUMBER	STRATOFLEX PART NUMBER	POSSIBLE VENDOR	LENGTH "L"	END FITTING "A"	END FITTING "B"	HOSE "C"	WEIGHT
D4002-1	156001-3S-0185	AVIALL/API	17.90	676-3S	676-3S	156-3	0.16 lbs
D4002-3	156001-3S-0154	AVIALL/API	14.76	676-3S	676-3S	156-3	0.15 lbs
D4002-5	156003-6D-0102	AVIALL/API	8.94	678-6D	676-6D	156-6	0.13 lbs
D4002-7	156005-6D-0213	AVIALL/API	20.31	680-6D	676-6D	156-6	0.19 lbs

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N AND B/N USING D2729-1 LABEL INSTALLED WITH D2182-045 HEAT SHRINK
- 7) WEIGHT: SEE TABLE

RELEASED
2011-11-16

DESIGN	AB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	BC		
CHECKED	AB	DRAWING NO. D4002	REV. D
MFG. APPR.	BE		SHEET 2 OF 2
APPROVED	MA	TITLE	SCALE
DE APPR.	MA	HOSE ASSEMBLY	NTS
DATE	11.10.06	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO27652**

Purchase Order Date 3/4/2015

PO Print Date 3/4/2015

Page Number 1 of 3

Order From :

VU-AVI003

Ship To : DART AEROSPACE LTD

AVIALL
PO BOX 842275

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

DALLAS, TX 75284-2275
USA

Contact Name

Buyer

Chantal Lavoie

Vendor Phone

905-676-1695

Customer POID

Customer Tax #

10127-2607

Ship To Contact

Terms

Net 30

Ship To Phone

Currency

USD

Ship Via:

FedEx Overnight collect

FOB

EXW - (Ex Works)

Ship Acct:

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	156001-3S-0185 AS PER DWG D4002 REV. D B129914	Hose Assembly	3/10/2015 Yes 3/10/2015		4.00 Each	\$107.14	\$428.56
Line Total:							\$428.56
2	156001-3S-0154 AS PER DWG D4002 REV. D B123064	Hose Assembly	3/10/2015 Yes 3/10/2015		4.00 Each	\$101.96	\$407.84
Line Total:							\$407.84

PO Instructions: Fedex Acc#151793240

Note:

3/4/2015



Hose Shop 2755 Regent Blvd. DFW Airport 75261

Phone 972-586-1380 Fax 972-586-1381 www.aviall.com

TSO CERTIFICATION

It is hereby certified that (A) The parts and/or materials reflected herein were produced under Federal Aviation Administration approved manufacturing and quality control system/methods as set forth in the FAA issued technical standard order authorizations (TSOA) issued to Stratoflex and (B) such part and/or materials are new and are in condition for safe operation.

Aviall Order Number: 1001036521

Part Numbers:

1. 156001-3S0185 4EA.
2. 156001-3S0154 4EA.

915-03-9

Signed: _____

Date: 3-6-15

"Aviall is not providing OEM parts. Aviall is an authorized Stratoflex distributor providing TSO assemblies. Numbers referenced per customer requirements are for customer reference ONLY and are in no way intended to be represented as OEM parts. Any reference to an OEM part number does not authorize or reflect installation authority for this part. The installation authority is provided by the mechanic installing this product in accordance with FAR Part 43".

If applicable, satisfactory compliance with the conditions and tests required for TSO approval indicates the hose assembly has met the minimum performance standards as stated in the TSO. Furthermore, it is the responsibility of the installer to determine the installation eligibility and that it will not cause the hose assembly to be subjected to conditions in excess of those for which it has been approved.

FORM# CERT -001